WHAT IS CLAIMED IS:

1. A method of managing business-to-business cooperation among multiple electronic service providers which enter transactions using computer processing, said method comprising the steps of:

enabling distributed interaction correlation processing among said electronic service providers by attaching tags to transmission interactions among said electronic service providers, said transmission interactions including requests and responses relating to said transactions, each said tag including information that uniquely identifies a particular transaction that is related to the transmission interaction to which said tag is attached, each said tag that is attached to one of said responses including management information indicative of operational parameters that are specific to a responding electronic service provider transmitting said response and indicative of operational parameters specific to all other electronic service providers from which management information was received by said responding electronic service provider in tags attached to same-transaction responses from said other electronic service providers, said management information being accessible separately from said responses; and

utilizing information within said tags to correlate said transmission interactions with said transactions, including identifying said operational parameters of said responding electronic service provider and said any other electronic service provider when one of said responses is received by an originating site in a succession of said electronic service providers that are cooperative in entering a specific transaction.

2. The method of claim 1 wherein said attaching of said tags is executed by appending headers to electronic documents, said electronic documents being said transmission interactions.

1   3. The method of claim 1 wherein said electronic service providers are
2   separate business enterprises that engage in transactions via the global
3   communications network referred to as the Internet, said step of enabling
4   distributed interaction correlation processing including forming said tags to
5   include correlation information that uniquely identifies a specific transaction
6   and to include management information, said management information
7   including said operational parameters when said management information is
8   included in a tag attached to one of said responses.

1   4. The method of claim 3 wherein said step of forming said tags includes
2   providing said management information to include a plurality of (1) an
3   electronic service health index, (2) an availability of a specific electronic
4   service, (3) an electronic service reliability index, (4) an electronic service
5   performance index, and (5) indications of faults at an electronic service
6   provider.

1   5. The method of claim 4 wherein said step of forming said tags further
2   includes providing business logic data that identifies current business
3   processing of a specific electronic service provider.

1   6. The method of claim 4 wherein said step of forming said tag includes
2   preserving said management information for each said electronic service
3   provider in said succession such that a tree of management information is
4   formed, with each electronic service provider in said succession adding
5   management information to said tree.

1   7. The method of claim 1 further comprising utilizing Application

2   Programming Interfaces (APIs) to initiate transaction registration and

3   document-to-transaction correlation processes at each of said electronic

4   service providers, said document-to-transaction correlation process being

5   an implementation of said step of utilizing said tags to correlate said

6   transmission interactions.

1   8. The method of claim 7 wherein said step of utilizing said APIs further

2   includes introducing an API to update said management information at each

3   said electronic service provider in said succession.

1   9. A method of managing business-to-business cooperation among multiple

2   electronic service (e-service) providers which enter transactions using

3   computer processing, wherein for each e-service provider said method

4   comprises the steps of:

5   locally registering each potential transaction initiated by said

6   e-service provider, including assigning a unique transaction identification to

7   each said potential transaction;

8   locally appending a tag to each request transmitted to a remote

9   e-service provider, said tag including a specific said transaction identification

10   assigned to a transaction with which said request is associated;

11   receiving responses from said remote e-service providers,

12   including receiving appended tags with said responses, each said appended

13   tag including the specific transaction identification assigned to the transaction

14   with which said response is directed and including management information

15   indicative of management parameters for each said remote e-service provider

16   with which interaction occurred in generating the particular response of said

17   appended tag, each appended tag thereby indicating a provider tree of

18   transaction interaction;

19   updating said management information to include local manage-

20   ment parameters in each said tag for which a received response from a

21   responding remote e-service provider is relevant to a received request from a

22   requesting remote e-service provider, including updating said provider tree to

23   indicate local transaction interaction;

24   transmitting responses to requesting remote e-service providers,

25   including appending a specific tag that is indicative of a specific transaction

26   and a specific provider tree for each said response; and

27   locally correlating said requests with said responses using said

28   tags, thereby enabling local determinations of end-to-end transaction

29   management.

1　10. The method of claim 9 wherein said step of appending said tag includes
2　generating a management information structure having a correlation com-
3　ponent and a management information object component, said step of
4　appending further including forming said tag as header information for
5　transmission with an independently accessible document, said responses and
6　said requests being said documents.

1　11. The method of claim 10 wherein said step that includes generating said
2　management information structure includes providing said correlation
3　component to identify a transaction instance and an interaction number.

1　12. The method of claim 11 wherein said documents are Extensible Markup
2　Language (XML) documents.

1　13. The method of claim 9 wherein said step of locally registering each
2　potential transaction includes registering a transaction instance in a
3　management library maintained at said each e-service provider.

1   14. An electronic service (e-service) provider system comprising:

2   a document engine configured to generate e-service documents,

3   including requests and responses;

4   a management library having storage for registering transaction

5   instances, such that each said transaction instance has a unique identifica-

6   tion;

7   a header generator for appending header information to each

8   said e-service document generated by said document engine, said header

9   information including said unique identification of a specific transaction

10   instance which corresponds to said e-service document for which said header

11   information is generated and further including management information

12   relevant to handling of said specific transaction instance, said header

13   generator being configured to update remote management information

14   received from a responding remote e-service provider when said manage-

15   ment information is forwarded as updated header information with a response

16   to a second remote e-service provider, such that updated header information

17   includes management information for each response in a succession of

18   responses;

19   a network interface connected to transmit and receive said

20   e-service documents and separately accessible header information to and

21   from said responding remote and second remote e-service providers via a

22   network; and

23   a correlation engine configured to cooperate with said manage-

24   ment library to correlate said e-service documents on a basis of said header

25   information and said updated header information received via said network

26   interface, thereby enabling end-to-end determinations of transaction

27   management.

1   15. The system of claim 14 wherein said network interface enables connec-

2   tivity to the Internet, said system and said remote e-service providers being

3   peer systems.

1   16. The system of claim 14 wherein said header generator is configured to
2   generate management information (MI) structures having a policy component
3   and having an MI component that contains said management information,
4   said policy component being indicative of a policy for handling a transaction
5   with which said MI structure is directed.

1   17. The system of claim 16 wherein said header generator is further
2   configured to generate said MI structures to include a component that is
3   indicative of business logic of said system, where said business logic of a
4   particular MI structure is relevant to said transaction to which said MI structure
5   is directed.

1   18. The system of claim 14 wherein said correlation engine and said
2   management library are configured to be responsive to Application
3   Programming Interfaces (APIs).